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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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COATS & BENNETT, PLLC				
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RALEIGH, NC 27602				
EXAMINER				
HRUSKOCL, PETER A				
ART UNIT		PAPER NUMBER		
1724				

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,751

Applicant(s)

WILLIAMS ET AL.

Examiner

Peter A. Hruskoci

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003 and 01 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-3, 5-11, 13-15, 27, 28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sower in view of Lloyd. Sower disclose (see col. 14 line 34 through 15 line 27, and col. 29 line 3 through col. 32 line 8) a method of treating animal or hog waste substantially as claimed. The claims differ from Sower by reciting that the separated liquid is returned to the confinement area for reuse, or hog barn for flushing waste. Lloyd disclose (see col. 1 line 61 through col. 4 line 60) that it is known in the art to separate water and solids from waste stream produced by flushing an animal house, and to recycle the water for reuse as flush water. It would have been obvious to one skilled in the art to modify the method of Sower by reusing the recited separated liquid for flushing waste in view of the teachings of Lloyd, to reduce the amount of water required to flush waste from the confinement area or hog barn. The specific pH utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific waste treated and results desired, absent a sufficient showing of unexpected results.

Claims 4, 16-21, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sower in view of Lloyd as above, and further in view of Seckler et al. 3,875,319. The claims differ from the references as applied above by reciting a step for separating the solids into undigested and digested feed. Seckler et al. disclose (see col. 3 line 15 through col. 4 line 51, and col. 8 lines 9-51) that it is known in the art to separate animal waste solids into undigested and digested feed, to aid in recovering protein, fiber, and grain feed products. It would have been obvious to one skilled in the art to modify the references as applied above, utilizing the recited solid separating step in view of the teachings of Seckler et al., to aid in recovering feed

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products. With regard to claim 19, it is submitted that the teachings of Seckler et al. appear to show the screening of hair from the undigested feed.

Claims 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sower in view of Lloyd as above, and further in view of Lamy et al.. The claims differ from the references as applied above by reciting a step for adding a coagulant to the waste mixture, and by using a specific solids separator or decanter. Lamy et al. disclose (see col. 1 line 8 through col. 4 line 55, and col. 7 lines 20-62) that it is known in the art to add a coagulant in combination with a flocculant to a effluent containing pig manure to decrease BOD and COD, and to separate solids from the effluent utilizing a flotation apparatus. It would have been obvious to one skilled in the art to modify the references as applied above, by adding a coagulant and utilizing the recited solid separator in view of the teachings of Lamy et al., to aid in decreasing BOD and COD, and separating solids from the waste mixture.

Claims 23-26, 29, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sower in view of Seckler et al. 3,875,319. The claims differ from Sower as applied above by reciting a step for separating the undigested and digested feed in the solid waste, and creating feedstock from the undigested feed. Seckler et al. disclose (see col. 3 line 15 through col. 4 line 51, and col. 8 lines 9-51) that it is known in the art to separate animal waste solids into undigested and digested feed, to aid in recovering protein, fiber, and grain feed products. It would have been obvious to one skilled in the art to modify the method of Sower, by utilizing the recited separating and creating steps in view of the teachings of Seckler et al., to aid in

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recovering feed products. With regard to claim 24, it is submitted that the teachings of Seckler et al. appear to show the screening of hair from the undigested feed.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sower in view of Seckler et al. as applied above, and further in view of Lloyd. The claims differ from the references as applied above, by reciting that the hog waste is flushed from the confinement area with water, and the water is reused to flush waste. Lloyd disclose (see col. 1 line 61 through col. 4 line 60) that it is known in the art to separate water and solids from waste stream produced by flushing an animal house, and to recycle the water for reuse as flush water. It would have been obvious to one skilled in the art to modify the references as applied above by flushing the waste and reusing the water for flushing waste in view of the teachings of Lloyd, to reduce the amount of water required to flush the confinement area.

Applicants allege that there is no evidence of record that indicates that there is a significant concern among those people skilled in the art in conserving water used for flushing animal houses. Applicants are directed to Sower (see col. 16 lines 23-34 and col. 35 lines 5-11) that it is known in the art to recycle to a source of organic waste for use as a flushing liquid. Lloyd as applied above discloses that it is known in art to flush an animal confinement area with recycled water produced from filtering solids from the animal waste. Furthermore, applicants have not provided sufficient factual evidence to support the above allegation.

Applicants argue that to aid in the recovery of feed products is not a sufficient motivation to combine the teachings of Seckler with Sower and Lloyd. It would appear from the teachings of Seckler as applied above that one skilled in the art would be motivated to separate undigested feed from animal waste for reuse as recited in the instant claims to aid in the recovery of

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byproducts such the feed products of Seckler. Furthermore, applicants have not presented sufficient probative evidence to support the above argument.

Applicants argue that one skilled in the art would not reuse the Sower liquid for flushing the hog house because the water leaving the anaerobic lagoon is loaded with viruses, bacteria, and pathogens, and contains significant amounts of ammonia. It is submitted that the lime added in Sower would eliminate pathogens in the organic waste as in the instant invention. Furthermore, Sower as applied above discloses that it is known in the art to recover ammonia from the organic waste before the liquid is recycled.

Applicants allege that the separated liquid is saturated with obnoxious odors and a person of ordinary skill in the art would be very reluctant to return the odor laden separated liquid from Sower back to the hog house. Applicants have not supplied sufficient factual evidence to support the above allegation.

Applicants argue that if the process of Sower is modified to extract undigested feed, that modification will have a serious impact on Sower's ability to manufacture fertilizer. It is noted that the instant method is also directed to forming fertilizer as recited in instant claim 14. Applicants have not presented sufficient probative evidence to support the above allegation.

Applicant argues that Sower does not teach the three processes of breaking down colloidal bonds, causing urea to release ammonia, and killing pathogens, taking place in the holding tank recited in claims 31-34. It is submitted that these processes appear to take place in the mixing or holding tank 612 shown in Fig. 6 of Sower.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is 703-308-3839. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Peter A. Hruskoci
Primary Examiner
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10/20/03

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